

ABSTRACT

The present invention provides a method and system for providing a bandwidth allocation scheduler for media delivery. The present invention includes determining an available bandwidth for file transmission for a time interval, and allocating at least a portion of the available bandwidth to at least one file transmission task, wherein a different amount of the available bandwidth may be allocated to each of the at least one file transmission tasks. The bandwidth allocation scheduler in accordance with the present invention comprises a set of program segments that provide fast, deterministic real-time scheduling for the allocation of bandwidth for file transmissions. It allows the bandwidth allocated to a delivery to vary according to the amount of bandwidth available. A different amount of bandwidth may be allocated to each individual file transmission tasks. Higher priority transmissions may be allocated bandwidth before allocation to lower priority file transmissions. The maximum bit rate of the slowest addressed receiver may be considered in allocating the bandwidth. Moreover, the customer can choose between different allocation strategies. Thus, the bandwidth allocation scheduler in accordance with the present invention reduces waste in bandwidth in media delivery, which in turn reduces costs for a customer.